

EXHIBIT A

Pettygrove Green Street-Special Function Street River District Right-of-Way Standards Performance Criteria

Location: River District Right-of-Way Standards for NW Pettygrove from NW 11th Avenue to NW 15th Avenue

Select from three (3) options (please refer to standard drawings RD 25A, RD 25B and RD 25C):

Option A: Four (4) motor vehicle parking spaces per block face, mix of large canopy and broad headed trees

Option B: Three (3) parking spaces per block face, mix of large canopy and broad headed trees

Option C: No motor vehicle parking spaces per block, large canopy trees

Important notes on implementation:

- i. Early submission of thirty (30) percent Public Works Permit with Type III Design review is strongly encouraged.
- ii. While these designs provide flexibility by providing design options, site specifics may limit what may be feasible on a particular block face, primarily the location of stormwater facilities. This may result in adjustments to the designs or limitations in the number of options. Strive to maintain the integrity of the overall designs, particularly the number, size and location of large canopy trees.
- iii. For options A and B only, the pattern for a full built out block (both sidewalks) will have staggered trees and parking between the north and south sidewalk areas.

The overall intent is to develop Options A and B in a manner that large trees are on the opposite side of the block, and avoid segments along Pettygrove without large canopy streets.

For example, when the first developer facing Pettygrove comes in for a public works permit, he or she can opt for any of the three options (A, B or C). If the developer chooses, say Option A, he or she has the option of where to locate the motor vehicle parking and large sidewalk area with large trees (east of west ends of the block face.) Subsequently, when the developer of the block across Pettygrove redevelops the property, he or she can also opt for any of the three options (A, B or C.) However, if the developer chooses options A or B, then the parking must be on the other side of the block face (east or west) as the block face already built.

Individual Items:

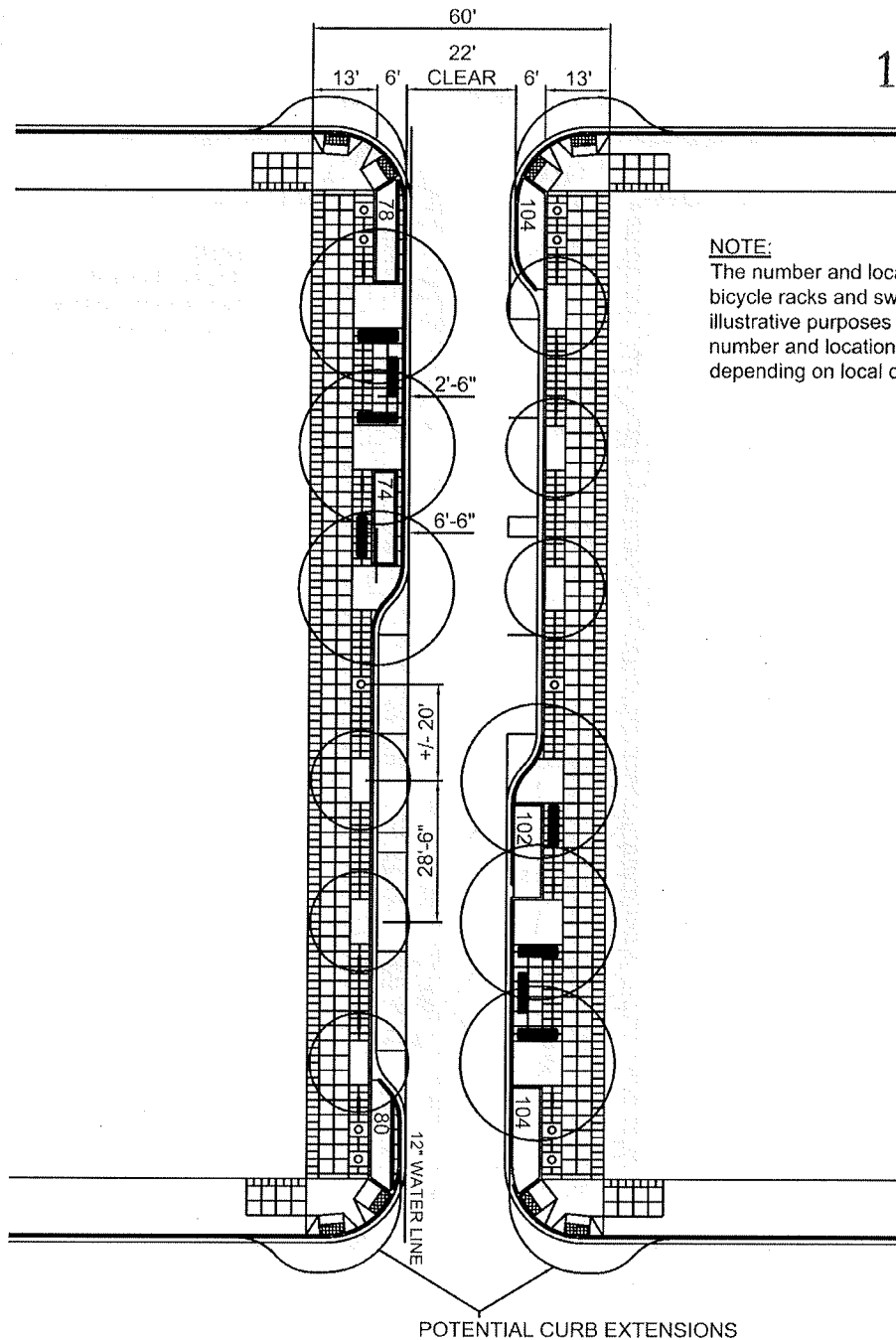
1. Sidewalk

- Thirteen (13) to nineteen (19) ft of sidewalk space
- At least six (6) ft of clear pedestrian through zone
- Americans with Disabilities Act (ADA) accessible dual curb ramps with truncated domes
- Curb extensions at both intersections
- Allow for pedestrian movement, street furniture, bike racks and traffic signalization poles at intersections
- Curve radii for curbs should be fifteen (15) ft and ten (10) ft for reverse curves

- The placement of utility vaults and vaulted basements on Pettygrove right-of-way is strongly discouraged; an attempt shall be made to locate them away from Pettygrove. If it can't be avoided, strive, with implementation of utility vaults and vaulted basements, to avoid impacting the placement and number of street trees and street lights.
2. Roadway
 - A minimum of twenty (20) feet clear will be maintained throughout to allow two-way direction of travel and accommodate emergency vehicles. A minimum of twenty-two (22) feet clear would be maintained between curbs.
 3. On street parking
 - Zero (0) to four (4) motor vehicle spaces per block face
 - Provide sufficient bicycle racks per block face to meet demand. Between two (2) and five (5) per block face are recommended.
 4. Trees
 - Minimum six (6) trees per block face using a mix of larger canopy (where sidewalk is wider) and smaller canopy trees (elsewhere). Aim for as many larger canopy trees as feasible
 - Trees approved by City Forester/*River District Right-of-Way Standards*
 - a. List of large canopy trees:
 - London Planetree
 - Accolade Elm
 - Bur Oak
 - Kentucky Coffee Tree
 - Legacy Sugar Maple
 - Green Vase Zelkova
 - Shumard Oak
 - Black Tupelo (for use in swales only if needed)
 - b. List of smaller trees: Refer to section 2.8.2 *Uniform Plantings/Broad-headed Street Trees* of the *River District ROW Standards*. Trees that can be planted in swales are also allowed.
 - Minimum size of tree planted will be four (4) inch caliper
 - Tree wells will be four by four (4x4) ft for trees in River District Right-of-Way Standard section 2.8.2, and about eight-and-a-half by eight-and-a-half (8.5x8.5) ft for "large trees" (see above)
 - Spacing between trees will be about thirty (30) ft
 - No tree grates required.
 5. Stormwater runoff: Manage all of the stormwater runoff in block face and roadway from centerline (or high point of crown) to curb to meet the current sizing requirements at the time of development in the *Stormwater Management Manual*. Recommended approach: Swale/planter (estimated to be about 250 sf, less if accompanied by the following elements)
 - Landscaping using City approved practices
 - Permeable materials
 - Trees and tree wells.

6. Street lighting
 - Three (3) street lights per block face
 - Preference for LED type lighting or white induction light with dimmable function
 - Street light type is Lumec Z-15, with straight pole, painted black.
7. Street furniture and art
 - Two (2) to four (4) benches
 - Installation of art pieces while maintaining the pedestrian functionality of the sidewalk, per River District Right-of-way Standards
 - Other (planters, trash receptacles, drinking fountain, news racks, kiosks, signage, and bike racks) per River District Right-of-Way Standards.
8. Encouraged but not required
 - **Landscaping** in the area adjacent to the building in the frontage zone (1-2 feet) while keeping six-to-seven (6-7) ft of clear through pedestrian zone
 - **Permeable materials** in on street parking area (it can reduce the impervious surface calculation) if it meets technical requirements
 - **Vehicle access** is strongly discouraged on Pettygrove. An attempt shall be made to locate **driveways** and **truck loading** not on Pettygrove but on adjacent streets
 - Encourage **electric vehicle charge stations and car sharing** on or on streets adjacent to Pettygrove
 - **Landscaping** in the tree wells, particularly the large ones
 - **Art pieces** encouraged along Pettygrove.

Plot Date: 11/22/2011 File Name: S:_II_Design\TR014\0001 - NW Pettygrove Green Street\CAD\PRESENTATION DRAWINGS\Pettygrove Improve.dgn








185122

NOTE:
The number and location of benches, bicycle racks and swales shown is for illustrative purposes only. Actual number and location will vary depending on local conditions.

Four (4) motor vehicle parking spaces per block face, mix of larger canopy trees and broad headed trees

LEGEND

-  BENCH (2-4 PER BLOCK FACE)
-  STAPLE BICYCLE RACK (2-5 PER BLOCK FACE)
-  STREET TREE (6 PER BLOCK FACE)
-  STREET LIGHT (3 PER BLOCK FACE)
-  STORMWATER FACILITY (+/- 250 SF PER BLOCK FACE)

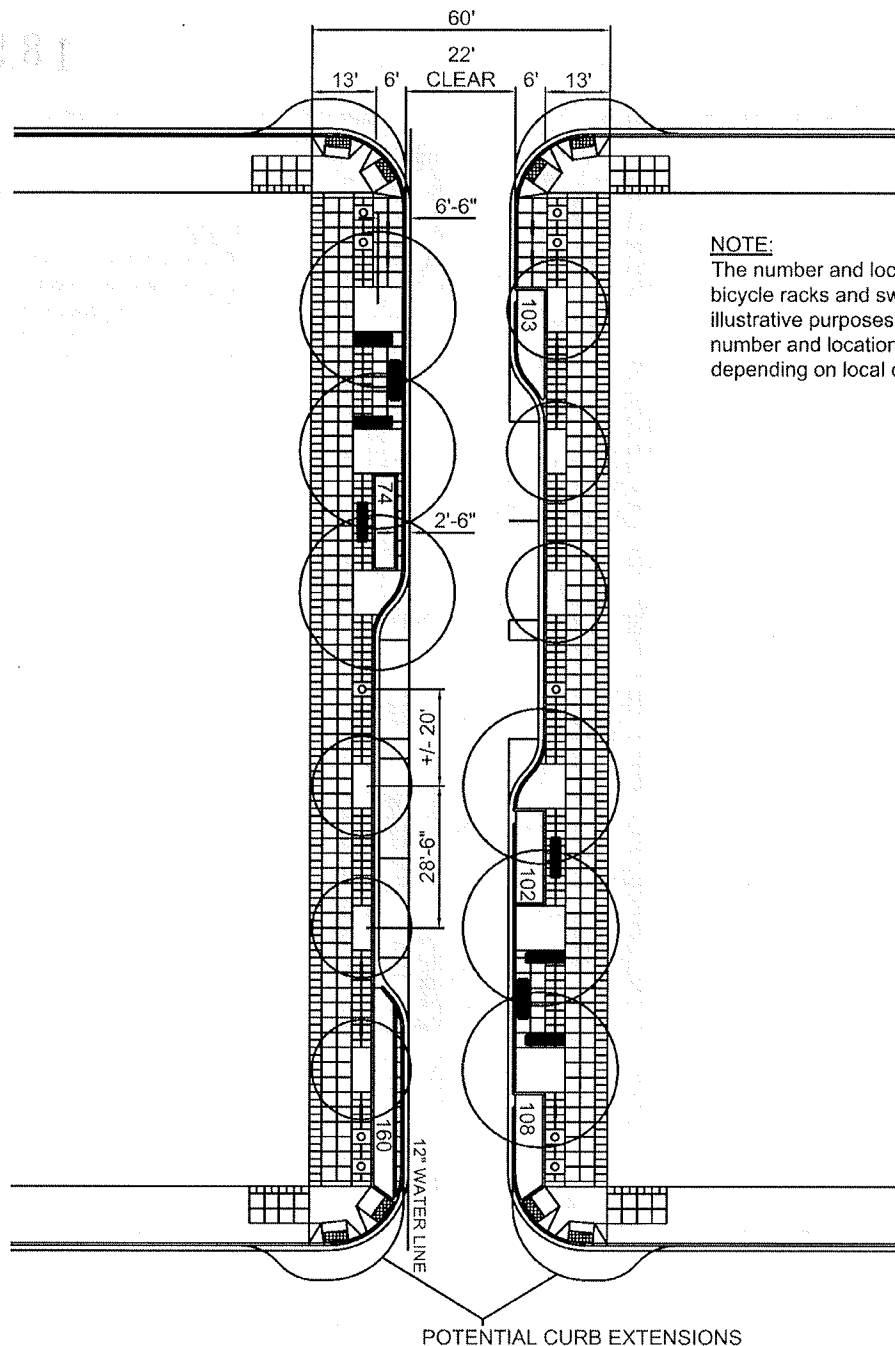
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.

Note:
All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.

PETTYGROVE STREET: OPTION A

NO.	REVISIONS	DATE	BY	APPROVED	STANDARD PLAN NO.
			AKR		RD-25A
				CITY ENGINEER	
				CITY OF PORTLAND, OREGON	

185122

**NOTE:**

The number and location of benches, bicycle racks and swales shown is for illustrative purposes only. Actual number and location will vary depending on local conditions.

POTENTIAL CURB EXTENSIONS

Three (3) motor vehicle parking spaces per block face, mix of larger canopy trees and broad headed trees

LEGEND

- BENCH (2-4 PER BLOCK FACE)
- STAPLE BICYCLE RACK (2-5 PER BLOCK FACE)
- STREET TREE (6 PER BLOCK FACE)
- STREET LIGHT (3 PER BLOCK FACE)
- STORMWATER FACILITY (+/- 250 SF PER BLOCK FACE)

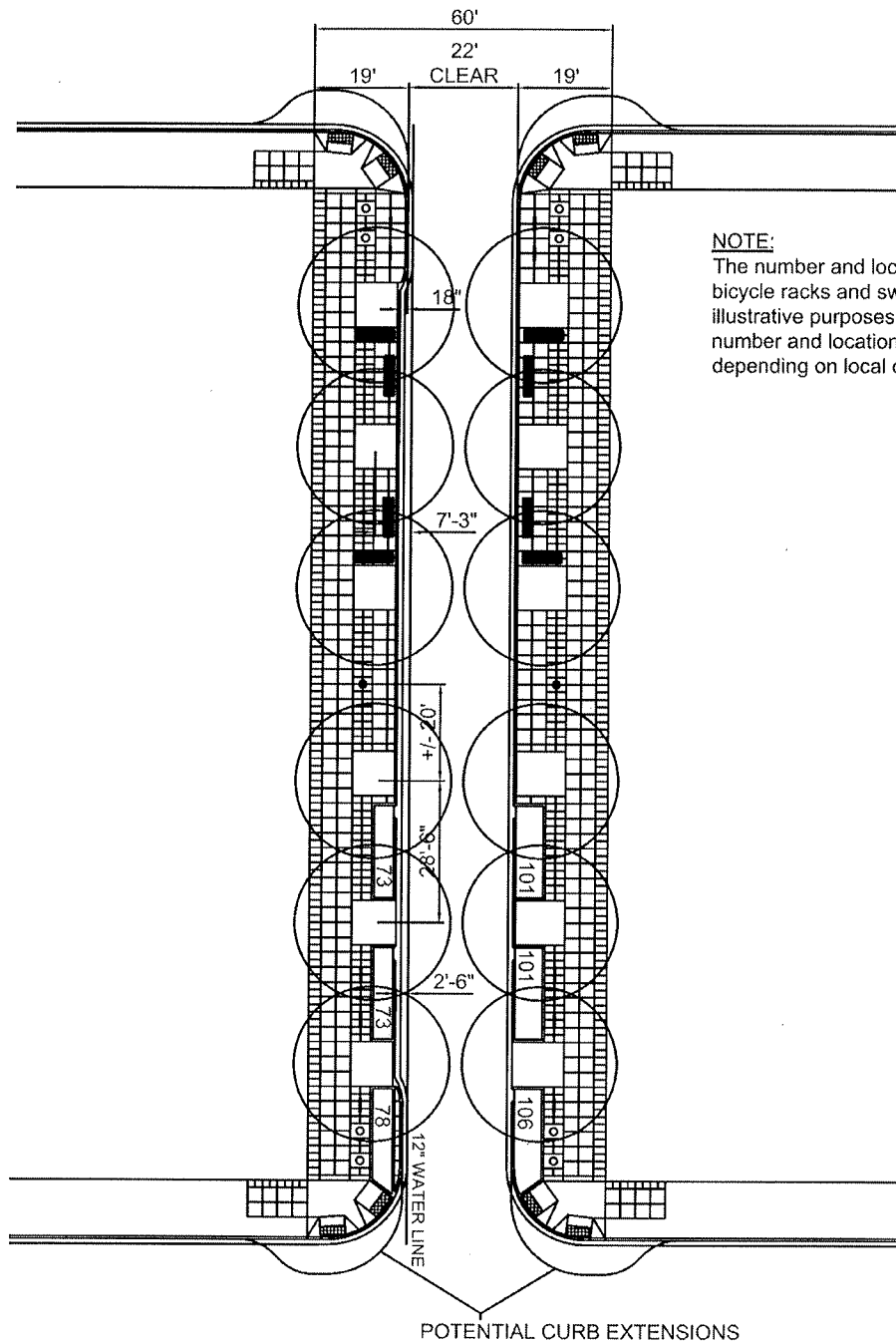
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.

Note:
All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.

PETTYGROVE STREET: OPTION B

NO.	REVISIONS	DATE	BY	APPROVED		STANDARD PLAN NO.
			AKR			RD-25B
				CITY ENGINEER	DATE	
				CITY OF PORTLAND, OREGON		

185122



NOTE:
The number and location of benches, bicycle racks and swales shown is for illustrative purposes only. Actual number and location will vary depending on local conditions.

NO MOTOR VEHICLE PARKING SPACES, LARGER CANOPY TREES

- LEGEND**
- BENCH (2-4 PER BLOCK FACE)
 - STAPLE BICYCLE RACK (2-5 PER BLOCK FACE)
 - STREET TREE (6 PER BLOCK FACE)
 - STREET LIGHT (3 PER BLOCK FACE)
 - STORMWATER FACILITY (+/- 250 SF PER BLOCK FACE)

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.

Note:
All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.

PETTYGROVE STREET: OPTION C

NO.	REVISIONS	DATE	BY	APPROVED		STANDARD PLAN NO.
			AKR			RD-25C
				CITY ENGINEER	DATE	
				CITY OF PORTLAND, OREGON		